

DERWENT-ACC-NO: 1987-223347

DERWENT-WEEK: 198732

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TITLE: Regulation of synchronous brushless alternator - using auxiliary supply to main excitation winding by auxiliary windings on stator

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PRIORITY-DATA: 1985FR-0018872 (December 19, 1985)

PATENT-FAMILY:

PUB-NO	MAIN-IPC	PUB-DATE	LANGUAGE	
FR 2592243 A	N/A	June 26, 1987	N/A	012
DE 3680786 G	N/A	September 12, 1991	N/A	000
EP 233425 A	N/A	August 26, 1987	F	000
EP 233425 B	N/A	August 7, 1991	N/A	000
ES 2000097 A	N/A	December 1, 1987	N/A	000
ES 2000097 B	N/A	March 1, 1992	N/A	000

DESIGNATED-STATES: DE ES FR GB IT DE ES FR GB IT

CITED-DOCUMENTS: DE 1952068; DE 2353832 ; GB 2071430 ; US 3132296 ; 1.Jnl.Ref

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
FR 2592243A	N/A	1985FR-0018872
December 19, 1985	N/A	1986EP-0402815

INT-CL_(IPC): H02K019/38; H02P009/36 ; H02P009/38

ABSTRACTED-PUB-NO: EP 233425B

BASIC-ABSTRACT: The method of regulation uses an electric supply

to the fixed excitation winding (1) derived from auxiliary windings (7,8) housed in the stator recovering respectively the fundamental voltage cycle and the third harmonic voltage, and regulates the current traversing the excitation coil in response to the normal conditions of operation of an alternator.

The terminal voltage and the voltage at the auxiliary winding are monitored and compared to set values by an electronic circuit to adjust the machine parameters to give the required short circuit impedance, reactive power, or optimal parallel operation.

USE/ADVANTAGE - Provides effective isolation for circuit regulating voltage, short circuit current, reactive power, and parallel operation without need of transformer.

ABSTRACTED-PUB-NO: FR 2592243A

EQUIVALENT-ABSTRACTS: A method of regulating a brushless synchronous alternator comprising a rotating exciter (2) having a stationary exciting field (1), more particularly for the regulation of the voltage, short circuit current and reactive power distribution in the case of parallel operation, the stationary exciting field (1) being energised by a first auxiliary winding (8) received in the alternator stator, the first winding (8) receiving the third-harmonic voltage of the alternator, the current which flows through the exciting field (1) being controlled in dependence upon the alternator output voltage, characterised in that the stationary exciting field (1) is also energised by a second auxiliary winding (7) which is received in the alternator stator and which receives the fundamental voltage of the alternator, and the current flowing through the stationary exciting field (1) is controlled in dependence upon the fundamental voltage, the said third-harmonic voltage and the alternator output voltage to selectively regulate the

last-mentioned voltage,
the off-load voltage, the short circuit current and the droop of
the
alternator. (9pp)

CHOSEN-DRAWING: Dwg.1/1

TITLE-TERMS:

REGULATE SYNCHRONOUS BRUSH ALTERNATOR AUXILIARY SUPPLY MAIN
EXCITATION WIND
AUXILIARY WIND STATOR

DERWENT-CLASS: X13

EPI-CODES: X13-G02A;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1987-167022